Remarks

Rejection of the claims under 35 USC §112:

Claims 1-9 have bee rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, because the term "polyamide" consists of new matter. Applicants have amended the claim to recite "polyamine".

Rejection of the claims under 35 USC §102:

Claims 1-3, 7-8, and 19-20 have been rejected under 35 U.S.C. 102(b) as being anticipated by Heiliger et al. (US 5,453,461) ('461). Applicants have amended the claims to obviate the rejection. Specifically, Applicants have amended claim 1 to incorporate the limitation of claim 9. Support for modification of amines by attachment of functional groups via a pH labile covalent bonds can be found in the specification on page 2 line 31 to page 3 line 22, page 4 lines 11-16, page 5 lines 5-7 and page 7 lines 5-15. Applicants have amended claim 19 to clarify that amines on the amphipathic membrane active polyamine are modified. It is the Applicants' opinion that '461 does not teach that the biologically active compound is attached to a membrane active polyamine or reversibly modifying amines on the membrane active polymer.

Claims 1-8, 16 and 19-20 have been rejected under 35 U.S.C. 102(e or a) as being anticipated by Pinchuk et al. (US 2002/0107330) ('330). Applicants have amended the claims to obviate the rejection. Specifically, Applicants have amended claim 1 to incorporate the limitation of claim 9. Applicants have amended claim 19 to clarify that amines on the amphipathic membrane active polyamine are modified. It is the Applicants' opinion that '330 does not teach that the biologically active compound is attached to a membrane active polyamine or reversibly modifying amines on the membrane active polymer.

Claims 1, 7-8, 17-18 and 19 have been rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (US 5,169,933) ('933). Applicants have amended the claims to obviate the rejection. Specifically, Applicants have amended claim 1 to incorporate the limitation of claim 9. Applicants have amended claim 19 to clarify that amines on the amphipathic membrane active polyamine are modified. It is the Applicants' opinion that '933 does not teach that the biologically active compound is attached to a membrane active polyamine or reversibly modifying amines on the membrane active polymer.

Appl. No. 10/780,484 Amdt. Dated 11/29/2006 Reply to Office action of: 08/31/2006

Double Patenting:

Claims 9-16 have been rejected under the judicially reacted doctrine on obviousness-type double patenting as being unpatentable over claims 9-10, 15-19, and 28-29 of copending Application No. 10/772,502. With this Response, Applicants have filed a terminal disclaimer to overcome the rejection.

New rejection of the claims under 35 USC \$102

Claims 1-5, 7-15, 17, and 19-20 have been rejected under 35 U.S.C. 102(b) as being anticipated by Wolff et al. (US 20010036926) ('926). Applicants have amended the claims to obviate the rejection. Specifically, Applicants have amended claim 1 to incorporate the limitations of claims 8 and 9. Applicants have amended claim 19 to clarify that amines on the amphipathic membrane active polyamine are modified. While '926 teaches an activated disulfide bond and further teaches that the bond can be used to form polymers or crosslink various compounds such as nucleic acids, '926 does not teach the specific combination of components in the instantly claimed invention. It is the Applicants' opinion that one would not have been reasonably motivated to attach a biologically active compound to a membrane active polyamine and reversibly modify amines on the membrane active polyamine from the teachings of '926.

The Examiner's objections and rejections are now believed to be overcome by this response to the Office Action. In view of Applicants' amendment and arguments, it is submitted that claims 1, 3-7, and 10-20 should be allowable.

Respectfully submitted,

/Kirk Ekena/

Kirk Ekena, Reg. No. 56,672 Mirus Bio Corporation 505 South Rosa Road Madison, WI 53719 608-238-4400 I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as express mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date: 111 Nov. 2006—

/Kirk Ekena/ Kirk Ekena